

What is claimed is:

1. A system for transmitting signals from a remote controller to an optically controlled device comprising:

a repeater device adapted to receive an optical input signal from the remote controller and to generate an electrical output signal;

a switching device that selectively connects the repeater device to a connector; and

a light emitting device connected to the connector for generating and transmitting an optical output signal to the optically controlled device in response to the electrical output signal received from the repeater device.

2. The system of claim 1, wherein the optical input signal is an infra-red signal.

3. The system of claim 1, wherein the switching device is a mechanical rotary switch.

4. The system of claim 1, wherein the switching device is a demultiplexer.

5. The system of claim 4, further comprising a computer adapted to provide a control input signal to the demultiplexer to select the connector carrying the electrical output signal.

6. The system of claim 1, further comprising a receiver control circuit located on a program receiver and adapted to control an operational setting of the program receiver in response to the optical output signal.

7. The system of claim 6, wherein the system is used in a broadcast control center for controlling one or more program receivers.

8. The system of claim 7, wherein the remote controller and the optically controlled device are located in separate locations.

9. A system for controlling multiple devices comprising:

a repeater device configured to receive an optical input signal from a remote controller and to convert the optical input signal into an electrical output signal;

a switching device adapted to output the electrical output signal to one of a plurality of conductors;

a plurality of infrared emitting devices connected to the plurality of conductors and configured to generate an optical output signal in response to the electrical output signal; and

a plurality of infrared responsive devices in optical communication with the plurality of infrared emitting devices.

10. The system of claim 9, wherein the switching device is a multi-position, mechanical rotary switch.

11. The system of claim 9, wherein the switching device is a demultiplexer.

12. A system of claim 9, wherein the plurality of infrared responsive devices are connected to a plurality of receiver controller devices

where each of the plurality of receiver controller devices is adapted to control an operational setting of a program receiver from a plurality of program receivers.

13. A system of claim 12, wherein the plurality of program receivers are adapted for use in a broadcast control center to receive programs to be re-transmitted on one of a television network and a cable network.

14. A system of claim 9, wherein the plurality of infrared responsive devices are connected to a plurality of cameras in a security surveillance network.

15. A method of transmitting an optical input signal from a remote controller to a light emitting device comprising:

transmitting the optical input signal from the remote controller;

receiving the optical input signal at a repeater;

converting the optical input signal into an electrical output signal;

selecting one of a plurality of conductors; and

transmitting the electrical output signal by the selected conductor to the light emitting device.

16. A method of claim 15, wherein the optical input signal is an infra-red signal.

17. A method of claim 15 further comprising:

converting the electrical output signal to an optical output signal;

transmitting the optical output signal to an optically controlled device;
and

controlling an operational setting of a program receiver in response to
the optical output signal received by the optically controlled device.

18. A method of claim 17, wherein selecting one of a plurality of
conductors comprises changing the setting of a mechanical rotary switch.

19. A method of claim 17, wherein selecting one of the plurality of
conductors comprises changing a control input signal of a demultiplexer.

20. A method of claim 19, wherein changing the control input
signal of the demultiplexer comprises generating the control input signal in a
computer and transmitting the control input signal from the computer to the
demultiplexer.